

IN THE CLAIMS

1 1. A MOSFET logic circuit for performing a logic OR operation comprising
2 three transistors, wherein at least two input signals are provided to the circuit and an
3 output signal indicative of an OR operation performed on a first and second input signal
4 of the at least two input signals is output from the circuit.

1 2. The logic circuit as in claim 1, wherein the three transistors include first
2 and second PMOS transistors and one NMOS transistor.

1 3. The logic circuit as in claim 1, wherein first and second transistors of the
2 three transistors form a transmission gate outputting one signal.

1 4. The logic circuit as in claim 1, wherein the first input signal is provided
2 to a source of first and second transistors of the three transistors, the second input signal
3 is provided to a gate of the second transistor, and a complement of the second input
4 signal is provided to a gate of the second transistor.

1 5. The logic circuit as in claim 3, wherein a complement of the second input is
2 provided to a gate of a third transistor of the three transistors.

1 6. The logic circuit as in claim 1, wherein the at least two input signals to
2 the circuit further comprise a complement of the second input signal.

1 7. The logic circuit as in claim 3, wherein when the second input signal has
2 a logic LOW level the output of the logic circuit is an output signal of the transmission
3 gate.

1 8. The logic circuit as in claim 3, wherein a third transistor of the three
2 transistors is a pull-up transistor, and when the second input signal has a logic HIGH
3 level the output of the logic circuit has a voltage level approximately equal to a drain of
4 the third transistor, which pulls up the output signal from the transmission gate to a logic
5 HIGH level.

1 9. The logic circuit as in claim 1, wherein a delay of the logic circuit is
2 one of a delay of a transmission gate formed by first and second transistors of the three
3 transistors, and a delay of a third transistor of the three transistors.

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